A New Species of *Hamotus* from Galleries of *Microcerotermes septentrionalis* in Western Mexico[1]

(Coleoptera: Pselaphidae)
(Isoptera: Termitidae)

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The proposed species can be placed by Park's (1942) monograph in the subgenus *Hamotoides*, Group XIV, where it keys out to *Hamotus* (*Hamotoides*) *veracruzensis* Park. This new species is easily separated from *H. veracruzensis* and all others in the group by the concave tergite V of both sexes.

Hamotus (Hamotoides) cavus Chandler and Nutting New Species

Stramineous to castaneous, stramineous pubescence composed of a moderate number of long setae. Head subtruncate at base; eyes prominent, containing approximately 37 facets; posterior emargination of eye densely pubescent, projecting across one-third eye width; two small vertexal foveae between eyes, large, oval median fovea between antennal tubercles; single median gular fovea; mandibles four-toothed; third segment of maxillary palpi with moderate groove through entire length; antennae with distinct, three segmented club.

Pronotum only slightly inflated anterior to foveae, its anterior edge truncate; median fovea not much wider than transverse sulcus connecting median and lateral foveae, transverse sulcus deep with distinct edges, lateral foveae large.

Elytron widened apically, rounded and notched at lateral apical edge and with two basal foveae; sternites and tergites gradually narrowing apically, sternites I-IV with lateral foveae, sternite V without, tergites I-IV margined laterally, I-III with two close lateral foveae on each side, IV-V with one lateral fovea on each side, tergite V concave.

Males with small spine on inner side of protibiae (fig. 1), spine difficult to see through dense pubescence.

Holotype male.—length 2.40 mm; head length 0.53 mm, width across eyes 0.51 mm, width across antennal insertions 0.25 mm, 0.29 mm from head base to median antennal fovea, vertexal foveae 0.08 mm from eyes, median antennal fovea 0.12 mm from vertexal foveae; antennal segment lengths and widths: I 0.17 × 0.09 mm; II 0.08 × 0.08; III 0.07 × 0.07; IV 0.07 ×0.07; V 0.06 × 0.08; VI 0.07 × 0.08; VII 0.05 × 0.08; VIII 0.05 × 0.08; IX 0.10 × 0.12; X 0.17 × 0.16; XI 0.24 × 0.19; third segment of maxillary palpi 0.31 mm long, 0.12 wide.

Pronotum length 0.48 mm, 0.24 mm wide at base, 0.52 mm wide across lateral foveae; median and lateral foveae 0.11 mm from base, lateral foveae 0.21 mm from median fovea.

Elytron 0.77 mm long, 0.56 mm wide near apex; fovea 0.06 mm apart on elytron; widths between lateral foveae of tergites: I 0.53 mm; II 0.65; III 0.59; IV 0.53;

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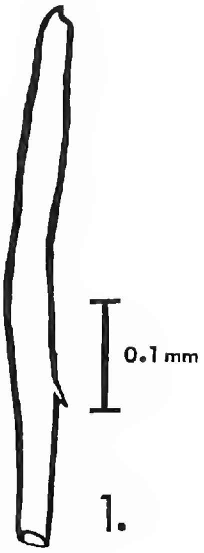

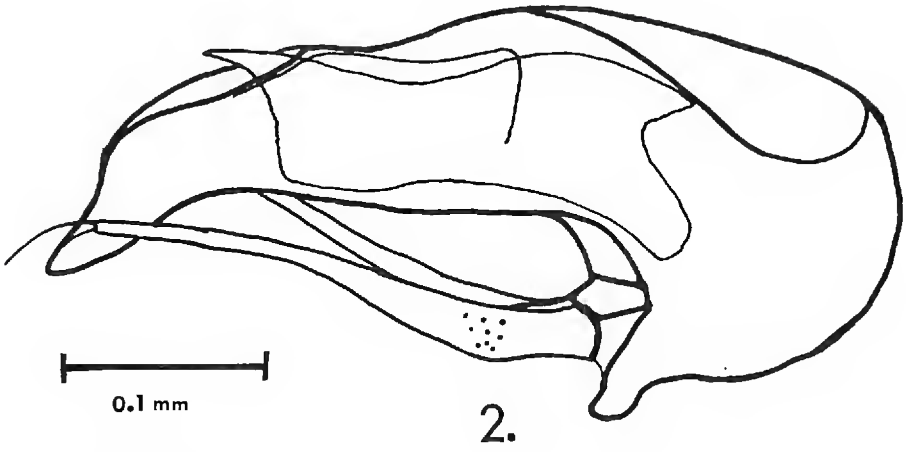

FIG. 1. Anterior view male protibia.
FIG. 2. Left lateral view male genitalia.

V 0.34; tergite V in form of rounded, thick rhomboid, 0.24 mm long; sternite widths between lateral foveae: I 0.73 mm; II 0.89; III 0.76; IV 0.57; sternite V 0.39 mm wide.

Protibia 0.51 mm long, spine 0.37 mm from base. Male genitalia asymmetrical (fig. 2).

FEMALE.—Similar to male but lacking spine on protibiae.

Holotype male, 3 MI N BARRA DE NAVIDAD, BAHIA DE COASTECOMATE, JALISCO, MEXICO, 9 August 1964, in galleries of *Microcerotermes septentrionalis*, W. L. Light and G. C. Nutting.

PARATYPES.—4 males, 15 females, same data as holotype. Slide mounted holotype male to be deposited at the Field Museum of Natural History, Chicago.

At least 40 of these beetles were observed when the extensive superficial galleries of *Microcerotermes septentrionalis* Light were broken into. The colony, probably numbering in the tens of thousands, occupied several feet of a sound log, about 1 foot in diameter and 12 feet long, in a dense thorn forest area. About two dozen pairs of *Nasutitermes nigriceps* (Haldeman) (*Termitidae*) were also established in cells within abandoned peripheral workings of the *Microcerotermes* colony. These incipient colonies consisted of pairs with no brood and some with a small number of eggs, nymphs and soldiers. Further, one incipient colony of *Incisitermes platycephalus* (Light) (Kalotermitidae) was found in the same situation.

Park (p. 310) mentions that other *Hamotus* species have been collected with termites. Little can be said about any kind of relationship between the new species and any of the termites beyond the fact that they were in the galleries with *Microcerotermes*. In such a rich association the possibility of their acting as predators seems especially good.

LITERATURE CITED

PARK, O. 1942. A study in neotropical Pselaphidae. Northwestern Univ. Studies Bio. Sci. Medicine, No. 1, 403 p.

SCIENTIFIC NOTE

Lectotype designation for *Gerris buenoi* Kirkaldy (Heteroptera: Gerridae).—Recently we wanted to examine the type material of *Gerris buenoi* Kirkaldy (1911, Entomol. News, 22: 246) in connection with our work on the aquatic Hemiptera of California. Kirkaldy's description was published posthumously through the efforts of J. de la Torre-Bueno. The description is incomplete to the extent that the number of specimens examined, their locality data, and deposition are not given. Kirkaldy apparently had both macropterous and apterous males and females. Torre-Bueno, in his note appended to Kirkaldy's description, states that E. P. Van Duzee supplied the material on which the description was based, and that the bugs bore a manuscript label "*Gerris sulcatus* Uhler." Furthermore, Torre-Bueno said that the "species is widely distributed and ranges from British Columbia to the Atlantic states."

Drake and Harris (1934, Ann. Carnegie Mus., 23: 179–240) apparently did not see type material of *buenoi* when they published their revision of the North American species, although they stated that the "type is in the Kirkaldy collection, U. S. National Museum." A search of this collection did not reveal its presence, and there is no record of the "type" ever having been deposited there.

Paul Arnaud, of the California Acadcmy of Sciences, San Francisco, has located in the Academy collection at least a portion of the material that was before Kirkaldy. It consists of three macropterous females all bearing E. P. Van Duzee collection labels. One specimen has a handwritten label "*Limnotrechus sulcatus* Uhl." plus the following locality data: Ft. Collins, Colorado, July 12, 1898, E. P. Van Duzee collector. We are selecting this specimen as lectotype of *Gerris buenoi* Kirkaldy. The data on the other two females are "N. Colo., May 10, 1898" and "Montreal West, May 4, 1903." The lectotype agrees with the usual interpretation of *buenoi*.—A. S. MENKE, *Systematic Entomology Laboratory, U.S.D.A., Washington, D. C. 20560* AND J. T. POLHEMUS, *University of Colorado Museum, Boulder.*